

Abstract

Vehicles (1-1) or ships (1-2) each carry a magnetic force line sensor (11), a GPS position detector (12), and a data transmitter (13) and travel within an observation area transmitting magnetic field data and position data of each point to an earthquake prediction center (4). A telluric current induction field estimation unit (43) of the earthquake prediction center (4) estimates telluric current induction fields based on the observation data that it receives and collects. A telluric current estimation unit (44) estimates telluric currents based on the results of estimating the telluric current induction fields. A telluric current induction field intensity change pattern generation unit (45) generates patterns that indicate the change over time of the intensity of telluric current induction fields. An earthquake prediction unit (46) analyzes the state of distribution of the telluric currents and the patterns of change in the intensities of the telluric current induction fields and estimates a seismofocal zone, seismic intensity, and time of occurrence of a seismic event.